



Hurricane Season

Preparing for an unwelcome but overdue guest

By Bob Gaffney

Whether it comes as Allison, Dean, Opal, or Tanya, a hurricane can have a devastating effect on homes, businesses and people and once again the Gulf Coast area must prepare for the Hurricane season.

Alicia, which struck the Houston/Galveston area in 1983, was the last serious hurricane to affect JSC. Cleanup and repair operations cost the center about 2.3 million dollars. So it's no surprise to anyone that the center has a plan for severe storms and that the Center Operations Directorate has the lion's share of the responsibility for preparing for nature's onslaught.

Hurricane season begins next week—June 1—and extends through November 30. The first step in preparing for a hurricane should be taken well in advance of the development of any tropical storms.

The JSC Emergency Preparedness Office has been updating the center's hurricane plan in coordination with the Hurricane Rideout Team since February. The most significant change in this year's plan is the reversal of hurricane preparedness status levels. In the past, the JSC plan increased preparedness levels from 1—normal operations—to 4—storm rideout and recovery.

"After evaluating other NASA centers, federal, state and local communities, it was determined that virtually the rest of the world categorizes the severity of emergency preparations by counting down—from 4 to 1," said Keith McQuary, JSC's emergency preparedness manger.

This year, the JSC hurricane plan corrects that inconsistency and also provides time frames for the preparedness levels so employees can know what activities remain to be completed prior to a storm making landfall and when they should consider implementing their personal emergency plan.

"JSC has always had a hurricane plan to

protect center facilities," McQuary said. Hurricane preparations are initiated whenever a hurricane enters the Gulf of Mexico or may make landfall along the upper Texas Gulf Coast within 72 hours—Level 4—McQuary said.

A group of 13 Area Protection Teams from the Plant Engineering Division ready JSC grounds for the storm—checking buildings, picking up loose objects outside and securing possible hazards. Supervisors are encouraged to initiate liberal leave policy for employees who may want to evacuate their family even before local governments recommend it.

When severe weather poses a significant threat to the center within 48-36 hours, Center Operations Director Jim Hickmon may direct McQuary to open the hurricane command post in the new Emergency Operations Center in Bldg. 30 Rm. 3100—Level 3.

When a storm is predicted to make landfall near Galveston within 36-24 hours and employee safety could be compromised, the JSC director can release employees and close the center. Emergency planners move to complete all protective measures that will place the center in a final state of preparedness—Level 2. Center Operations notifies JSC directorate and contractor emergency planning representatives whenever the center's preparedness level changes. There are about 56 representatives and alternates scattered throughout the center, including the Child Care Center.

Additionally, JSC has two recorded services that carry information on hurricane preparedness activities. The Emergency Information Line, x33351, is used to provide information on potential storms, provides procedures for safeguarding work areas and information throughout the year on other area emergencies; and the Employee Information Service, x36765, which contains information about closings during hurricane season as they are announced.

Whenever the JSC director has closed the

center due to an emergency, employees will be notified when to return to work through the recorded information services and radio and television reports.

Employees are asked to secure their work areas prior to departure if the center is closed. Such preparations include unplugging computer terminals and covering them with plastic bags, raising window blinds to prevent additional wind damage should windows break, properly storing classified or sensitive materials in safe areas and closing all doors.

"Emergency workers will drop off plastic bags in the lobby of major buildings in the event of an approaching storm for employees to use but garbage bags also would protect equipment," McQuary said.

When a storm is within 12-24 hours of the center, all outside activities are terminated and Hurricane Rideout Team employees will remain in the Hurricane Command Post until the storm no longer poses a threat to JSC—Level 1.

After the storm passes, the Hurricane Rideout Team Captain will assign teams to begin assessing any damage and recommend to the JSC director when it will be safe for employees to return to work. If there has been severe damage to center facilities, the Center Operations director will consult with other senior managers to determine how best to restore normal operations and provide recommendations.

Because last year's hurricane season was so active, but hurricane effects were nonexistent at JSC, area emergency managers and weather forecasters expressed concern that residents would not heed warnings in time to protect themselves, their families and property. The potential damage from hurricanes increases tenfold as the force of a hurricane increases from one category to the next.

"Employees should be prepared to protect themselves and their family," McQuary said. "You never know when you may have to evacuate your residence due to a hurricane."

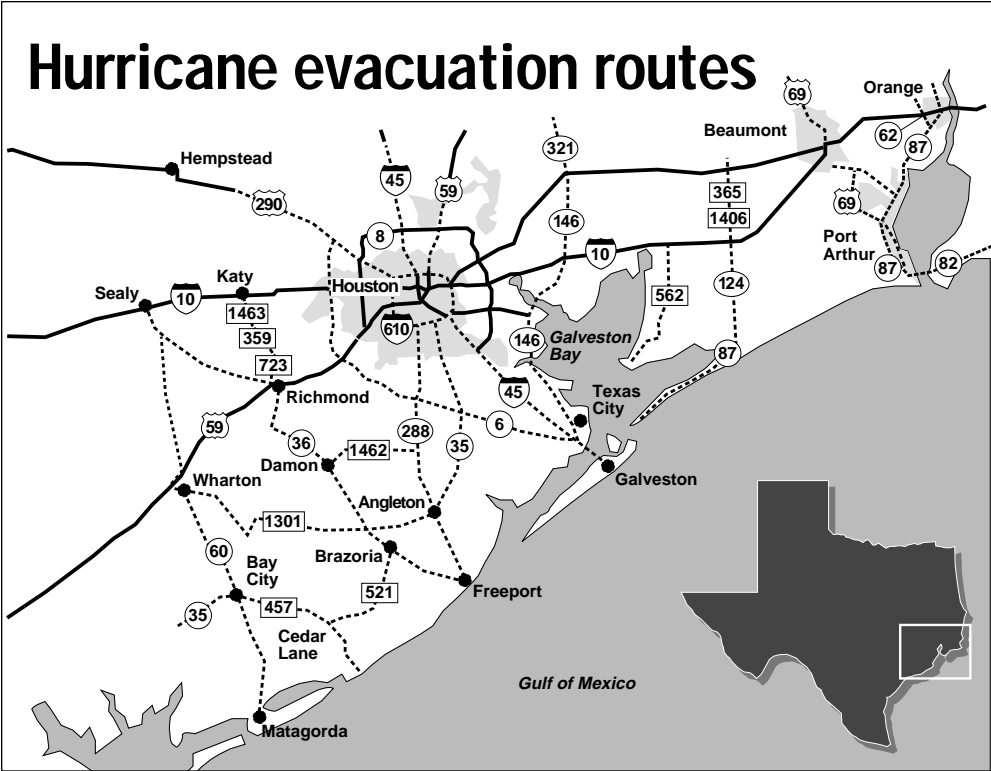
In the past, Galveston has recommended residents evacuate coastal areas approximately 30 hours before a storm is predicted to make landfall nearby. Residents of communities inland from Galveston frequently choose to evacuate in order to avoid getting caught in their low-lying home or on the open road when the storm arrives. The best recommendation for people living between Houston and Galveston who choose to evacuate is to plan on leaving early enough to avoid road congestion.

To help employees better prepare for the hurricane season, the Image Services Branch will broadcast hurricane awareness videos at 9 a.m. and 3 p.m. from June 10-14 on channel 23. Supervisors are encouraged to schedule safety meetings to coincide with these educational videos in order to inform employees unfamiliar with the dangers of hurricanes how they can protect themselves and their families.

There are also several storm-related Internet sites available, including JSC's own Spaceflight Meteorological Group (<http://shuttle.nasa.gov/weather/smghome.html>). One of the best sites containing hurricane preparation information is The Palm Beach Post, in Florida (<http://www.pbpost.com/hurricane96>). Their current site contains information about the extremely active 1995 season as well as information on preparing a home and boat, supplies and what to do each day leading up to landfall.

The National Weather Service will host a Hurricane Workshop at the Pasadena Convention Center from 8 a.m.-noon, next Thursday, June 6. The public is invited and admission is free. Hurricane Hunter aircraft will be on display in the afternoon at Ellington Field. Free hurricane maps are available from the JSC Emergency Preparedness Office, Bldg. 1, Rm. 443, or by calling x34249.

Further information is also available from any emergency planning representative or in your community's emergency management, fire, or police department. □



Above: The STS-47 crew captures Hurricane Bonnie as it nears Bermuda in 1992. Work on widening NASA Road 1 finally began this month, but there are still only a limited number of highways out of Clear Lake leading inland. Emergency Manager Keith McQuary recommends keeping this evacuation route and supply list close at hand during hurricane season.

Emergency Supply Kit

- Flashlight
- Tissues
- Radio
- Pocket Knife
- Sanitary Supplies
 - Toothbrush
 - Soap
 - Shampoo
 - Sponge
 - Cleanser
 - Bleach
- Batteries
- Pencils
- Drinks/Juices
- Nuts
- Rice – Pastas
- Soups
- Canned Foods
- Water (1 gal per person per day)

30-gallon trash barrel

- First Aid Kit
- Medicines
- Rubbing Alcohol
- First Aid Handbook
- Towels
- Blankets
- Paper Towels
- Toilet Paper
- Candles
- Matches
- Can Opener
- Peanut Butter
- Crackers
- Dried Beans
- Change of Clothing
- Foul Weather Gear
- Sterno, Stove, Fuel
- Garbage Bags
- Cooking Utensils
 - Cooking Pot
 - Plastic Dishes
 - Silverware
 - Aluminum Foil